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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,544	11/27/2001	Uwe Fischer	DE9-2000-0031 (267)	8179

40987 7590 05/26/2005	EXAMINER
AKERMAN SENTERFITT	SANTOS, PATRICK J D

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ART UNIT	PAPER NUMBER
2161	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

X

	Application No.	**Applicant(s)**
Office Action Summary	09/994,544	FISCHER ET AL.
	Examiner	**Art Unit**	
	Patrick J Santos	2161	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*15 February 2005*</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2.   Claims 1 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,515,490 issued to Buchanan et al. (hereafter Buchanan '490) in view of U.S. Patent No. 5,649,060 issued to Ellozy et al. (hereafter Ellozy '060).

<u>Claim 1</u>:

Regarding Claim 1, Buchanan '490 discloses an automatic temporal formatter for synchronizing multimedia data streams such as video, audio, and text (e.g. subtitles). Specifically, Buchanan '490 discloses: a computer-based method of synchronizing a realization of a media (Buchanan '490: Abstract) stream having a first representation synchronized with said realization, and at least one second representation (Buchanan '490: col. 57, lns. 11-13), said method comprising:

- determining structure information for said first representation and said at least one second representation (Buchanan '490: col. 23, lns. 59-65; col. 57, lns. 20-30);

- determining structure association information between said first representation and said at least one second representation (Buchanan '490: col. 23, ln. 66 to col. 24, ln. 10; col. 57, lns. 31-50); and

- synchronizing said at least one second representation with said first synchronized

representation and said realization using said structure association information (Buchanan

'490: col. 24, lns. 11-15; col. 57, lns. 51-63; col. 58, lns. 9-23).

However, Buchanan '490 does not explicitly disclose: wherein said structure association

information includes semantic structure association information.

Ellozy '060 discloses: wherein said structure association information includes semantic

structure association information (Ellozy '060: col. 9, ln. 64 to col. 10, ln. 15 – note that this

information is used to align an audio representation and a text representation strictly using word

content i.e. semantic structure information, rather than temporal information; see Ellozy '060:

col. 3, ln. 31 to col. 4, ln. 48).

It would have been obvious to a person having ordinary skill in the art to augment the

temporal alignment means of Buchanan '490 with the semantic structural alignment means of

Ellozy '060. The motivation to combine is suggested by Ellozy '060 which discloses that use of

the means of Ellozy '060 expands the audio-video data that Buchanan '490 may operate on by

providing support for audio-video data that are not time correlated (Ellozy '060: col. 1, lns. 64-

67).

Claim 13:

Examiner notes that Claim 13 is the apparatus embodiment of Claim 1 and is rejected on

the same basis.

3.   Claims 2-3 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Buchanan '490 and Ellozy '060 in view of the publication, "Synchronization Relation Tree : A

model for Temporal Synchronization in Multimedia Presentation", by Kim et al. published as

Technical Report TR92-42, by the Dept. of Computer Science, Univ. of Minnesota, 1992

(hereafter Kim '92).

Claim 2:

Regarding Claim 2, Buchanan '490 and Ellozy '060 in combination disclose all the

limitations of Claim 1 (supra). Additionally, Buchanan '490 and Ellozy '060 in combination

disclose: said step of determining structure information further comprising: analyzing said

structure information of said first and said at least one second representation (Buchanan '490:

col. 23, lns. 59-65; col. 57, lns. 20-30). Furthermore, Buchanan '490 and Ellozy '060 in

combination disclose providing a stream of temporal data (Buchanan '490: col. 23, lns. 59-65;

col. 3, lns. 40-47, note that data provided continuously over runtime reads on a stream).

However, Buchanan '490 and Ellozy '060 in combination do not explicitly disclose: the stream

of temporal data comprised of tree locators.

Kim '92 discloses a synchronization relation tree (Kim '92: Abstract). (Note that a data

structure that contains pointers to data corresponding to the nodes rather than the data itself reads

on tree locators).

It would have been obvious to a person having ordinary skill in the art to apply the

synchronization relation tree of Kim '92 to the automatic formatter of Buchanan '490 and Ellozy

'060 in combination. The motivation to combine is suggested by Kim '92 which discloses: the

synchronization relation tree provides for both "temporal relationship consistency" and "dynamic

schedule completion" and further is better suited for an object-oriented implementation (Kim

'92: p.3, ln. 38 to p. 4, ln. 3).

Claim 3:

Regarding Claim 3, Buchanan '490, Ellozy '060, and Kim '92 in combination disclose all

the limitations of Claim 2 (supra). Further note that Buchanan '490 and Kim '92 in combination

disclose: aligning said determined structure information of said first representation and said at

least one second representation (Buchanan '490: col. 24, lns. 11-15; col. 57, lns. 51-63; col. 58,

lns. 9-23) using said semantic structure association information in a form lacking temporal

information (Ellozy '060: col. 3, ln. 31 to col. 4, ln. 48; col. 1, lns. 64-67).

Claims 14-15:

Examiner notes that Claims 14-15 are the apparatus embodiment of Claims 2-3

respectively and are rejected on the same basis.

4.   Claims 4-5, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Buchanan '490, Ellozy '060, and Kim '92 in view of the publication, "Cooperative Use of

MHEG-5 and HyTime", by Rutledge et al., published by Proceedings of Hypertext and

Hypermedia, 1997 (hereafter Rutledge '97).

Claim 4:

Regarding Claim 4, Buchanan '490, Ellozy '060, and Kim '92 in combination disclose all

the limitations of Claim 3 (supra). Buchanan '490, Ellozy '060, and Kim '92 in combination

further disclose: wherein said realization comprises at least one version of content, said method

further comprising: aligning said at least one version of content with said first representation

(Buchanan '490: col. 24, lns. 11-15; col. 57, lns. 51-63; col. 58, lns. 9-23). However, Buchanan

'490, Ellozy '060, and Kim '92 in combination do not explicitly disclose: to produce a web of

relations between said at least one version of content and said first representation.

Rutledge '97 discloses MHEG-5 and HyTime (Hypermedia/Time-based Structuring Language): producing a web of relations (Rutledge '97: Section 2, titled "Standards for Hypermedia", second paragraph).

It would have been obvious to a person having ordinary skill in the art to apply the HyTime language of Rutledge '97 to the Buchanan '490, Ellozy '060, and Kim '92 combination. The motivation to combine is suggested by Rutledge '97 which discloses: HyTime especially in cooperation with MHEG-5 provides a particularly advantageous combination for the encoding of hypermedia (and multimedia) presentations (Rutledge '97: Abstract).

Claim 5:

Regarding Claim 5, Buchanan '490, Ellozy '060, Kim '92, and Rutledge '97 in combination disclose all the limitations of Claim 4 (supra). Further note that Buchanan '490, Ellozy '060, Kim '92, and Rutledge '97 additionally disclose: aligning said at least one version of content with said first representation produces a web of relations between a structural view of said at least one version of content and said first representation (Buchanan '490: col. 24, lns. 11-15; col. 57, lns. 51-63; col. 58, lns. 9-23; Rutledge '97: Section 2, titled "Standards for Hypermedia", second paragraph).

Claims 16-17:

Examiner notes that Claims 16-17 are the apparatus embodiment of Claims 4-5 respectively and are rejected on the same basis.

5.   Claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buchanan '490, Ellozy '060, Kim '92, and Rutledge '97 in view of U.S. Patent No. 5,731,847

issued to Tsukagoshi et al. (hereafter Tsukagoshi '847), in further view of U.S. Patent No.

5,794,197 issued to Alleva et al. (hereafter Alleva '197), and morever in view of the publication,

"Using the Strategy Design Pattern to Compose Reliable Distributed Protocols", by Garbinato et

al. published by the USENIX Conference on Object-Oriented Technologies and Systems, 1997

(hereafter Garbinato '97).

Regarding Claim 6, Buchanan '490, Ellozy '060, Kim '92, and Rutledge '97 in

combination disclose all the limitations of Claim 3 (supra). Further note that Buchanan '490,

Ellozy '060, Kim '92, and Rutledge '97 in combination disclose: aligning media streams

(Buchanan '490: col. 24, lns. 11-15; col. 57, lns. 51-63; col. 58, lns. 9-23). However, Buchanan

'490, Ellozy '060, Kim '92, and Rutledge '97 in combination do not explicitly disclose: aligning

an audio stream specified by said media stream with an audio structure corresponding to said

audio stream.

Tsukagoshi '847 discloses an encoder and decoder of subtitle information. Specifically,

Tsukagoshi '847 discloses: aligning an audio stream specified by said media stream (Tsukagoshi

'847: col. 11, lns. 45-50). However, Tsukagoshi '847 does not explicitly disclose: aligning with

an audio structure corresponding to said audio stream.

Alleva '197 discloses a specific alignment of an audio structure from an audio stream

(Alleva '197: col. 13, lns. 40-46). Note that while analysis of an audio stream under Tsukagoshi

'847 is optional, the combination of Alleva '197 to Tsukagoshi '847 requires the generation and

subsequent alignment of an audio structure from an audio stream. However, Alleva '197 does

not explicitly disclose: aligning with an audio structure corresponding to said audio stream

Garbinato '97 discloses the well-known Strategy design pattern. Specifically, Buchanan '97 discloses that objects designed to handle distinct types of data and/or interactions are to be distinct via the Strategy design pattern (Garbinato '97: p. 1, col. 2, lns. 14-27).

It would have been obvious to a person to apply the augment the automatic formatter of Buchanan '490, Ellozy '060, Kim '92, and Rutledge '97 in combination with the rate controller with the encoder/decoder of Tsukagoshi '847. The motivation to combine is suggested by Buchanan '490 which discloses: the automatic formatter of Buchanan '490, Ellozy '060, Kim '92, and Rutledge '97 operates during run-time (Buchanan '490: col. 3, lns. 11-15) and further that application of the automatic formatter of Buchanan '490, Ellozy '060, Kim '92, and Rutledge '97 combined with Garbinato '97 provides the advantage of handling unpredictable data changes such as that of the runtime subtitle to video/audio matching of Tsukagoshi '847 (Buchanan '490: col. 3, lns. 40-47; col. 6, lns. 7-10).

It would have been further obvious to a person having ordinary skill in the art to modify the Buchanan '490, Ellozy '060, Kim '92, Rutledge '97, and Tsukagoshi '847 combination to Alleva '197. The motivation to combine is suggested by Alleva '197 which discloses that utilization of the invention of Alleva '197 provides a particularly advantageous means to model speech and audio, such as that of the subtitle information of Buchanan '490, Ellozy '060, Kim '92, Rutledge '97, and Tsukagoshi '847 (Alleva '197: col. 2, lns. 49-63).

It would have been moreover obvious to a person having ordinary skill in the art to modify the Buchanan '490, Ellozy '060, Kim '92, Rutledge '97, Tsukagoshi '847, and Alleva '197 combination by separating the structuring functions of the first and second operations into distinct aligner objects as per the Strategy design pattern of Garbinato '97. The motivation to

accomplish said modification is suggested by Garbinato '97 which discloses that encapsulating

the aligner implementations into separate objects and invoking via a Strategy design pattern

provides the advantages of providing both design time and runtime composition of aligner

implementations and furthermore overcomes the limitations of an inheritance based

implementation (Garbinato '97: p. 3, col. 2, ln. 3 to p. 4, col. 1, ln. 24).

Claim 18:

Examiner notes that Claim 18 is the apparatus embodiment of Claim 6 and is rejected on

the same basis.

6.   Claims 7 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Buchanan '490, Ellozy '060, and Kim '92 in view of U.S. Patent No. 5,731,847 issued to

Tsukagoshi et al. (hereafter Tsukagoshi '847), in further view of the publication, "Using the

Strategy Design Pattern to Compose Reliable Distributed Protocols", by Garbinato et al.

published by the USENIX Conference on Object-Oriented Technologies and Systems, 1997

(hereafter Garbinato '97).

Claim 7:

Regarding Claim 7, Buchanan '490, Ellozy '060, and Kim '92 in combination disclose all

the limitations of Claim 3 (supra). Further note that Buchanan '490, Ellozy '060, and Kim '92 in

combination disclose: aligning media streams (Buchanan '490: col. 24, lns. 11-15; col. 57, lns.

51-63; col. 58, lns. 9-23). However, Buchanan '490, Ellozy '060, and Kim '92 in combination

do not explicitly disclose: aligning a text stream specified by said media stream with a text

structure corresponding to said text stream.

Tsukagoshi '847 discloses an encoder and decoder of subtitle information. Specifically, Tsukagoshi '847 discloses: aligning a text stream specified by said media stream (Tsukagoshi '847: col. 11, lns. 28-35). However, Tsukagoshi '847 does not explicitly disclose: aligning wth a text structure corresponding to said text stream.

Garbinato '97 discloses the well-known Strategy design pattern. Specifically, Buchanan '97 discloses that objects designed to handle distinct types of data and/or interactions are to be distinct via the Strategy design pattern (Garbinato '97: p. 1, col. 2, lns. 14-27).

It would have been obvious to a person to apply the automatic formatter of Buchanan '490, Ellozy '060, and Kim '92 for the rate controller with the encoder/decoder of Tsukagoshi '847. The motivation to combine is suggested by Buchanan '490 which discloses: the automatic formatter of Buchanan '490, Ellozy '060, and Kim '92 operates during run-time (Buchanan '490: col. 3, lns. 11-15) and further that application of the automatic formatter of Buchanan '490, Ellozy '060, and Kim '92 with Garbinato '97 provides the advantage of handling unpredictable data changes such as that of the runtime subtitle to video/audio matching of Tsukagoshi '847 (Buchanan '490: col. 3, lns. 40-47; col. 6, lns. 7-10).

It would have been further obvious to a person having ordinary skill in the art to modify the Buchanan '490, Ellozy '060, Kim '92, and Tsukagoshi '847 combination by separating the structuring functions of the first and second operations into distinct aligner objects as per the Strategy design pattern of Garbinato '97. The motivation to accomplish said modification is suggested by Garbinato '97 which discloses that encapsulating the aligner implementations into separate objects and invoking via a Strategy design pattern provides the advantages of providing both design time and runtime composition of aligner implementations and furthermore

overcomes the limitations of an inheritance based implementation (Garbinato '97: p. 3, col. 2,

ln. 3 to p. 4, col. 1, ln. 24).

Claim 19:

Examiner notes that Claim 19 is the apparatus embodiment of Claim 7 and is rejected on

the same basis.

7.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buchanan '490 in

view of Ellozy '060 in further view of Garbinato '97.

Claim 8:

Regarding Claim 8, Buchanan '490 discloses: a system for synchronizing a realization of

a media stream (Buchanan '490: Abstract) having a first representation synchronized with said

realization, and at least one second representation, (Buchanan '490: col. 57, lns. 11-13) said

method comprising:

- a structurer configured to determine structure information for said first representation

  (Buchanan '490: col. 23, lns. 59-65; col. 57, lns. 20-30);

- a structurer configured to determine structure information for said at least one second

  representation (Buchanan '490: col. 23, lns. 59-65; col. 57, lns. 20-30); and

- a first aligner configured to align said structure information for said first representation

  and said at least one second representation (Buchanan '490: col. 23, ln. 66 to col. 24, ln.

  10; col. 57, lns. 31-50).

However, Buchanan '490 does not explicitly disclose:

- wherein said first aligner aligns in part at least a semantic structure association information lacking temporal data forming a portion of said structure information for said first representation and said at least one second representation;

- that the structurer for the first representation and the structurer for the second representation are distinct.

Ellozy '060 discloses:

- wherein said first aligner aligns in part at least a semantic structure association information lacking temporal data forming a portion of said structure information for said first representation and said at least one second representation (Ellozy '060: col. 3, ln. 31 to col. 4, ln. 48; col. 1, lns. 64-67);

However, Ellozy '060 does not explicitly disclose that structurer for the first representation and the structurer for the second representation are distinct.

Garbinato '97 discloses the well-known Strategy design pattern. Specifically, Buchanan '97 discloses that objects designed to handle distinct types of data and/or interactions are to be distinct via the Strategy design pattern (Garbinato '97: p. 1, col. 2, lns. 14-27).

It would have been obvious to a person having ordinary skill in the art to augment the temporal alignment means of Buchanan '490 with the semantic structural alignment means of Ellozy '060. The motivation to combine is on the same basis as Claim 1 (supra).

It would have been further obvious to a person having ordinary skill in the art to modify Buchanan '490 and Ellozy '060 by separating the structuring functions of the first and second operations into distinct structurer objects as per the Strategy design pattern of Garbinato '97. The motivation to accomplish said modification is suggested by Garbinato '97 which discloses

that encapsulating the structurer implementations into separate objects and invoking via a

Strategy design pattern provides the advantages of providing both design time and runtime

composition of structurer implementations and furthermore overcomes the limitations of an

inheritance based implementation (Garbinato '97: p. 3, col. 2, ln. 3 to p. 4, col. 1, ln. 24).

8.   Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buchanan '490,

Ellozy '060, and Garbinato '97 in view of Tsukagoshi '847.

Claim 9:

Regarding Claim 9, Buchanan '490, Ellozy '060, and Garbinato '97 in combination

disclose all the limitations of Claim 8 (supra). However, Buchanan '490, Ellozy '060, and

Garbinato '97 in combination do not disclose: at least one renderer configured to render said at

least one second representation, after being synchronized, in a form suitable for displaying as an

overlayed subtitle.

Tsukagoshi '847 discloses an encoder and decoder of subtitle information. Specifically,

Tsukagoshi '847 discloses: at least one renderer configured to render said at least one second

representation, after being synchronized, in a form suitable for displaying as an overlayed

subtitle (Tsukagoshi '847: col. 16, lns. 1-15). Note that Tsukagoshi '847 teaches "a rate

controller which controls the rate that the compressed video is transferred to the multiplexer in

synchronism with the rate that the subtitles are sent to the multiplexer" (Tsukagoshi '847: col.

11, lns. 37-43).

It would have been obvious to a person to apply the augment the automatic formatter of

Buchanan '490, Ellozy '060, and Garbinato '97 for the rate controller with the encoder/decoder

of Tsukagoshi '847. The motivation to combine is suggested by Buchanan '490 which discloses:

the automatic formatter of Buchanan '490, Ellozy '060, and Garbinato '97 operates during run-

time (Buchanan '490: col. 3, lns. 11-15) and further that application of the automatic formatter of

Buchanan '490, Ellozy '060, and Garbinato '97 provides the advantage of handling

unpredictable data changes such as that of the runtime subtitle to video/audio matching of

Tsukagoshi '847 (Buchanan '490: col. 3, lns. 40-47; col. 6, lns. 7-10).

9.   Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buchanan '490,

Ellozy '060, Garbinato '97, and Tsukagoshi '847 in view of Kim '92.

Claim 10:

        Regarding Claim 10, Buchanan '490, Ellozy '060, Garbinato '97, and Tsukagoshi '847 in

combination disclose all the limitations of Claim 9 (supra). Buchanan '490, Ellozy '060,

Garbinato '97, and Tsukagoshi '847 further disclose that the realization specifies a media stream

(Buchanan '490: col. 57, lns. 11-13). However, Buchanan '490, Ellozy '060, Garbinato '97, and

Tsukagoshi '847 in combination do not explicitly disclose: system further comprising: a tree

aligner configured to determine a tree structure for said media stream.

        Kim '92 discloses a synchronization relation tree. Specifically, Kim '92 discloses: the

system further comprising: a tree aligner configured to determine a tree structure for said media

stream (Kim '92: Abstract).

        It would have been obvious to a person having ordinary skill in the art to apply the

synchronization relation tree of Kim '92 to the Buchanan '490, Ellozy '060, Garbinato '97, and

Tsukagoshi '847 in combination. The motivation to combine is suggested by Kim '92 which

discloses the synchronization relation tree provides for both "temporal relationship consistency"

and "dynamic schedule completion" and further is better suited for an object-oriented

implementation (Kim '92: p.3, ln. 38 to p. 4, ln. 3).

10.   Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buchanan

'490, Ellozy '060, Garbinato '97, Tsukagoshi '847, and Kim '92 in combination in further view

of the publication, "Detection of Target Speakers in Audio Databases," by Magrin-Chagnolleau,

published by ICASSP, 1999 (hereafter Magrin-Chagnolleau '99).

Claims 11-12:

        Regarding Claims 11-12, Buchanan '490, Ellozy '060, Garbinato '97, Tsukagoshi '847,

and Kim '92 in combination disclose all the limitations of Claim 10 (supra). However,

Buchanan '490, Ellozy '060, Garbinato '97, Tsukagoshi '847, and Kim '92 in combination do

not explicitly disclose:

-   (Claim 11) means for detecting speech and non-speech boundaries; and

-   (Claim 12) means for detecting transitions and speaker changes.

        Magrin-Chagnolleau '99 disclose: means for detecting speech and non-speech boundaries

and means for detecting transitions and speaker changes (Magrin-Chagnolleau '99: Abstract;

Section 4 titled, "Detection Algorithm").

        It would have been obvious to a person having ordinary skill in the art to apply the means

of Magrin-Chagnolleau '99 to the Buchanan '490, Ellozy '060, Garbinato '97, Tsukagoshi '847,

and Kim '92 combination. The motivation to accomplish said application is suggested by

Magrin-Chagnolleau '99 which discloses, the advantages of automatically detecting "useful cues

to segment, classify, and organize" audio data using multiple speakers (Magrin-Chagnolleau '99:

Abstract, Section 1, titled, "Introduction.").

Response to Arguments

11.   Applicant's arguments filed February 15, 2005 have been fully considered but they are

not persuasive. Applicant's arguments are addressed as follows:

A.   The Addition of the Ellozy '060 Reference as Necessitated by
       Amendment Addresses Structural Information Without Reliance On Temporal Data.

       Examiner notes amendments to Claims 1, 3, 8, and 13 and associated arguments

(Amendment: pp. 7-9) which emphasize that the structural information in the pending

application does not rely on temporal data. These amendments necessitated the addition of

Ellozy '060 which discloses an alignment means of an audio representation and a text

representation which relies solely on word content (i.e. semantic content) (Ellozy '060: col. 3,

ln. 31 to col. 4, ln. 48). Furthermore, Ellozy '060 specifically discloses that the representations

are not time correlated, i.e. does not rely on temporal data (Ellozy '060: col. 1, lns. 64-67).

B.   The Addition of the Ellozy '060 Reference
       Addresses Arguments Regarding the Remainer of the References.

       Examiner notes that the remainder of the arguments (regarding Kim, Rutledge,

Tsukagoshi, Alleva, and Garbinato) rely on emphasizing the structural information in the

pending application does not rely on temporal data (Amendment: pp. 9-11). Since Ellozy '060

addresses this new limitation, remarks regarding Argument A (supra), apply to the remainder of

the arguments as well.

Conclusion

12.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Patrick J Santos whose telephone number is 571-272-4028. The

examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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